

Claims

1. An apparatus for vibration-insulated mounting of an electric motor (20), in particular a blower motor, having a first housing part (10), which encloses at least one pole ring (22) and magnets (24) of the electric motor (20) and has at least one opening (14, 16), through which the shaft (18) of the motor (20) reaches, and having a second housing part (54), which is embodied as a motor flange for securing the electric motor (20) to a carrier element, for instance a motor vehicle heating and/or air conditioning system, and at least partly embraces the first housing part (10) in the axial direction of the motor shaft (18), characterized in that on the outer circumference (26) of the first housing part (10), a plurality of radially extending, relatively flat plastic spokes (28) are provided, which engage associated, radially and axially extending recesses (57) of the second housing part (54), and which in the region of their radially outer end (32) have connecting means (36) for securing them to the second housing part (54).

2. The apparatus of claim 1, characterized in that the first housing part (10) and the second housing part (54) comprise plastic.

3. The apparatus of claim 2, characterized in that the plastic spokes (28) are embodied integrally with the first housing part (10).

4. The apparatus of [one of claims 1-3] claim 1, characterized in that the plastic spokes (28) are shaped essentially trapezoidally, preferably in such a way that with

increasing radial distance from the motor (20), the axial length of the spokes (28) decreases.

5 5. The apparatus of [one of the foregoing claims] claim 1, characterized in that the plastic spokes (28) are soft in their transverse direction, that is, the axial direction of the motor shaft (18), so that torsional torque pulses of the motor (20) are damped and decoupled from the second housing part (54).

10 6. The apparatus of [one of the foregoing claims] claim 1, characterized in that the number of plastic spokes (28) provided on the first housing part (10) is at least three and is preferably in the range from three to six.

15 7. The apparatus of [one of claims 1-6] claim 1, characterized in that the plastic spokes (28), on each of their radial ends (32) remote from the motor (20), have additional damping elements (34), which are essentially perpendicular to the radial direction of the plastic spokes (28).

20 8. The apparatus of claim 7, characterized in that the additional damping elements (34) on the ends of the plastic spokes (28) likewise comprise plastic and are shaped integrally with the plastic spokes (28).

25 9. The apparatus of claim 8, characterized in that the additional damping elements (34) extend at least over the entire axial length of the radial end (32), remote from the motor, of the plastic spokes (28).

30 10. The apparatus of [one of claims 7-9] claim 7, characterized in that the additional damping elements (34), on

each of their axial ends toward the second housing part (54),
have at least one axially extending connecting means (36), and in
particular at least one peg (44), which engages a correspondingly
shaped indentation in the recess (57) of the second housing part
(54).

11. The apparatus of claim 10, characterized in that the
axial connecting means (36), in particular the pegs (44) of the
additional damping elements (34), are solidly connected, and in
particular riveted, to the second housing part (54).

12. The apparatus of [one of claims 7-11] claim 7,
characterized in that the additional damping elements (34) are at
least partly embraced by rubber elements (48), which come to rest
between the damping element (34) of the plastic spokes (28) of
the first housing part (10) and the wall of the associated recess
(57) in the second housing part (54).

13. The apparatus of [one of the foregoing claims]
claim 1, characterized in that the recesses (57) of the second
housing part (54), for receiving the plastic spokes (28) of the
first housing part (10), taper conically in the axial direction,
so that after the two housing parts (10, 54) have been axially
joined together, the plastic spokes (28) are partly clamped into
the associated recesses (57).